Amendments To The Claims

The listing of claims replaces all prior versions and listings of claims. Only those claims being amended herein show their changes in highlighted form, where insertions appear as underlined text (e.g., <u>insertions</u>) while deletions appear as strikethrough text (e.g., ~~deletions~~).

1. **(Previously Presented)** A method of managing power consumption in a pulse oximeter, the method comprising:

operating a pulse oximeter at a first approximate power consumption during a first signal condition representative of a condition of a signal received from a sensor capable of detecting energy attenuated by tissue of a measurement site of a patient;

determining a second signal condition of the signal; and

operating the pulse oximeter at a second approximate power consumption different than the first approximate power consumption based on the second signal condition, wherein the step of operating the pulse oximeter at the first approximate power consumption comprises generating a drive signal for the sensor at a first duty cycle, and wherein the step of operating the pulse oximeter at the second approximate power consumption comprises generating the drive signal for the sensor at a second duty cycle different from the first duty cycle.

2. **(Original)** The method of Claim 1, wherein the first signal condition corresponds to a high signal quality condition and the first approximate power consumption corresponds to a low power consumption.

3. **(Original)** The method of Claim 1, wherein the second signal condition corresponds to a low signal quality condition and the second approximate power consumption corresponds to a high power consumption.

4. **(Canceled)**

5. **(Previously Presented)** The method of Claim 1, wherein the first duty cycle comprises approximately three percent (3%) and the second duty cycle comprises approximately twenty-five percent (25%).

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6. (**Original**) The method of Claim 1, wherein the steps of operating the pulse oximeter at a first approximate power consumption and operating the pulse oximeter at a second approximate power consumption comprises varying a duty cycle of a drive signal for the sensor.

7. (**Original**) The method of Claim 6, wherein the varying the duty cycle comprises varying the duty cycle between approximately three percent (3%) and approximately twenty-five percent (25%).

8. (**Original**) A pulse oximeter capable of varying its power consumption, comprising:

an emitter driver which outputs a drive signal capable of driving at least one emitter of a sensor that detects energy attenuated by tissue of a measurement site of a patient; and

a controller which selects between at least a first duty cycle of the drive signal corresponding to a first power consumption and a second duty cycle of the drive signal corresponding to a second power consumption different than the first power consumption.

9. (**Original**) The pulse oximeter of Claim 8, wherein the first power consumption corresponds to a low power consumption and is associated with a high signal quality of at least one signal received from the sensor.

10. (**Original**) The pulse oximeter of Claim 8, wherein second power consumption corresponds to a high power consumption and is associated with a low signal quality of at least one signal received from the sensor.

11. (**Original**) The pulse oximeter of Claim 8, wherein the first duty cycle is substantially lower than the second duty cycle.

12. (**Original**) The pulse oximeter of Claim 11, wherein the first duty cycle comprises approximately three percent (3%) and the second duty cycle comprises approximately twenty-five percent (25%).

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13. (**Previously Presented**) The method of Claim 1, wherein the steps of operating the pulse oximeter at the first approximate power consumption and of operating the pulse oximeter at the second approximate power consumption comprises varying an amount of data blocks processed.

14. (**Previously Presented**) The method of Claim 1, wherein the steps of operating the pulse oximeter at the first approximate power consumption and of operating the pulse oximeter at the second approximate power consumption comprises varying power to a detector front end.

15. (**Previously Presented**) The method of Claim 1, comprising:

determining a override condition exists; and

returning to operating the pulse oximeter at the first approximate power consumption.

16. (**Previously Presented**) The pulse oximeter of Claim 8, wherein the controller varies an amount of data blocks processed.

17. (**Previously Presented**) The pulse oximeter of Claim 8, wherein the controller varies power to a detector front end.

18. (**Previously Presented**) The pulse oximeter of Claim 8, wherein the controller selects based on at least an estimate of power consumption as compared to a target power consumption.

19. (**Previously Presented**) The pulse oximeter of Claim 8, wherein the controller selects based on a quality of a signal responsive to the detected energy from said sensor.

20. (**Previously Presented**) The pulse oximeter of Claim 8, wherein the controller selects based on one or more determined values of a physiological parameter responsive to the detected energy from said sensor.

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21. **(New)** A method of modifying power consumption of an oximeter, the method comprising:

operating said oximeter at a lower power consumption by at least one of activating emitters of a noninvasive optical sensor at a decreased duty cycle or reducing overlap in data blocks being processed;

determining a transition event should occur; and

operating said oximeter at a higher power consumption by at least one of activating said emitters of said sensor at an increased duty cycle or increasing overlap in said data blocks being processed.

22. **(New)** The method of Claim 21, wherein the operating said oximeter at said lower power consumption comprises activating said emitters at said decreased duty cycle, and wherein the operating said oximeter at said higher power consumption comprises activating said emitters at said increased duty cycle.

23. **(New)** The method of Claim 22, wherein said decreased duty cycle can range as low as about 3.125 % and said increased duty cycle can range as high as about 25 %.

24. **(New)** The method of Claim 21, wherein the operating said oximeter at said lower power consumption comprises decreasing said overlap, and wherein the operating said oximeter at said higher power consumption comprises increasing said overlap.

25. **(New)** The method of Claim 24, wherein said decreased overlap is associated with a time shift ranging as high as about 4.8 seconds and said increased overlap is associated with a time shift ranging as low as about 1.2 seconds.

26. **(New)** The method of Claim 21, wherein the operating said oximeter at said lower power consumption comprises intermittently removing power from a processing front end, and wherein the operating said oximeter at said higher power consumption comprises powering said processing front end.

27. **(New)** The method of Claim 21, wherein said determining said transition event should occur comprises evaluating one or more characteristics of one or more signals from one or more light sensitive detectors.

28. **(New)** The method of Claim 27, wherein said one or more characteristics comprises signal strength.

29. **(New)** The method of Claim 27, wherein said one or more characteristics comprises a presence of noise.

30. **(New)** The method of Claim 27, wherein said one or more characteristics comprises a presence of motion induced noise.

31. **(New)** The method of Claim 21, wherein said determining said transition event should occur comprises determining an estimate of current power consumption and comparing said estimate with a target power consumption.

32. **(New)** The method of Claim 21, wherein said determining said transition event should occur comprises determining an override condition exists.

33. **(New)** The method of Claim 21, wherein said override condition comprises a critical monitoring environment.

34. **(New)** The method of Claim 21, wherein said override condition comprises one or more monitored physiological parameters exhibiting predefined behavior.